

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior listings of claims in the application.

**Listing Of Claims:**

**Claim 1 (currently amended):** An imaging optical system for imaging ~~on a predetermined surface~~ information on an object surface in a region having a length (A) in a long side direction and a length (B) in a short side direction which satisfy a relation of  $A/B > 10$ , on an image plane, comprising:

a diaphragm;

a first set of a plurality of off-axial reflection surfaces arranged on ~~[[an]]~~ the object surface side from the diaphragm; and

a second set of a plurality of off-axial reflection surfaces arranged on ~~[[an]]~~ the image ~~surface~~ plane side from the diaphragm,

wherein an optical path of a light beam passing through a center of the diaphragm and a center of ~~an image obtained through the imaging~~ the image plane is deflected by the off-axial reflection surfaces within a surface perpendicular to the long side direction of the ~~object~~ region to undergo crossing at least once,

wherein all of the off-axial reflection surfaces satisfy a conditional expression:

$$|P|S < 0.5$$

where P ( $\text{mm}^{-1}$ ) represents an optical power of the off-axial reflection surface within the surface perpendicular to the long side direction and S (mm) represents a distance from the off-axial reflection surface to a subsequent one of the off-axial reflection surfaces along a reference axis.

**Claim 2 (previously presented):** An imaging optical system according to claim 1, wherein the crossing of the optical path is caused on the object surface side from the diaphragm.

**Claim 3 (canceled).**

**Claim 4 (currently amended):** An imaging optical system for imaging on a predetermined surface information on an object surface in a region having a length (A) in a long side direction and a length (B) in a short side direction which satisfy a relation of  $A/B > 10$ , on an image plane, comprising:

a diaphragm;

a first set of a plurality of off-axial reflection surfaces arranged on ~~[[an]]~~ the object surface side from the diaphragm; and

a second set of a plurality of off-axial reflection surfaces arranged on ~~[[an]]~~ the image surface plane side from the diaphragm,

wherein an optical path of a light beam passing through a center of said diaphragm and a center of an image obtained through the imaging the image plane is deflected by said the off-axial reflection surfaces within a surface perpendicular to said the long side direction of the object region to undergo crossing at least once, and,

wherein the number (X) of off-axial reflection surfaces included in the first set of the plurality of off-axial reflection surfaces and the number (Y) of off-axial reflection surfaces included in the second set of the plurality of off-axial reflection surfaces satisfy a relation:

$$0.65 < X/Y < 1.6.$$

**Claim 5 (currently amended):** An imaging optical system according to claim 1, wherein the crossing of the optical path is caused on both the object surface side and the image surface plane side from the diaphragm.

**Claim 6 (currently amended):** An imaging optical system according to claim 1, wherein optical powers applied by the reflection surfaces of the imaging optical system to the long side direction of the imaged region are all positive.

**Claim 7 (original):** An imaging optical system according to claim 1, wherein an intermediate image is not formed in the optical path.

**Claim 8 (currently amended):** An image reading apparatus comprising:

the imaging optical system according to claim 1; and  
a line sensor arranged substantially in [[an]] the image surface plane position of  
the imaging optical system and adapted to convert a formed image to an electrical signal.

**Claim 9 (currently amended):** An image reading apparatus comprising:  
the imaging optical system according to claim 2; and  
a line sensor arranged substantially in [[an]] the image surface plane position of  
the imaging optical system and adapted to convert a formed image to an electrical signal.

**Claim 10 (canceled)**

**Claim 11 (currently amended):** An image reading apparatus comprising:  
the imaging optical system according to claim 4; and  
a line sensor arranged substantially in [[an]] the image surface plane position of  
the imaging optical system and adapted to convert a formed image to an electrical signal.

**Claim 12 (currently amended):** An image reading apparatus comprising:  
the imaging optical system according to claim 5; and  
a line sensor arranged substantially in [[an]] the image surface plane position of  
the imaging optical system and adapted to convert a formed image to an electrical signal.

**Claim 13 (currently amended):** An image reading apparatus comprising:  
the imaging optical system according to claim 6; and  
a line sensor arranged substantially in [[an]] the image surface plane position of  
the imaging optical system and adapted to convert a formed image to an electrical signal.

**Claim 14 (currently amended):** An image reading apparatus comprising:  
the imaging optical system according to claim 7; and  
a line sensor arranged substantially in [[an]] the image surface plane position of the imaging  
optical system and adapted to convert a formed image to an electrical signal.